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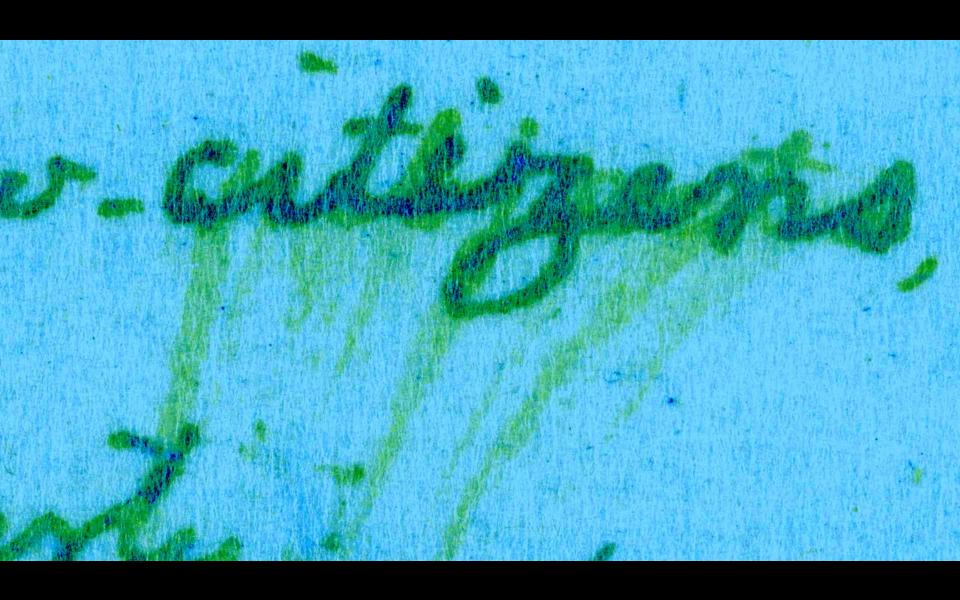
Analog and Digital Preservation

- Issues of "readability" of data from analog machine dependent technologies
- Impact of new technologies to recover historic scientific and scholarly information
- "Access" to open source non-proprietary file formats of scientific and scholarly data files
- Collaborative and cooperative preservation

Jefferson's Handwritten Draft of the Declaration of Independence tabolishing our most comparation alaws
for taking away over charters balking fundamentally the forms four governments a Declaration by the Representatives of the UNITED STATES Le has collaborated domestic insuperations amongst in and has has bring on the inhabitants of our frontiers the merciless Inde for suspending our own legislatures & declaring themselves invested with power to savages, whose known rule of warfare is an undistinguished destruction all ages, vexes, & conditions of excistence: he has incited treasonable insurrections of our fellow cutigens, with the he has constrained offer feel to the property of the high read to be farmed of their feel of the feel to be the security of their feel of the head to be a secure of their feel of the head to be a wage of cruel war against human nature itself, violating it's most of - cred rights of life bliberty in the pressons of a distant people who never o fended him, captivating & corrying them into slavery in another hemi -sprhere, or to incur miserable death in their transportation thether. It piralical warfare, the opprobrium of infidel prowers, is the warfare of the

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Subtraction of bands 10-5 (NIR – green visible) image inverted, with overlay

Javages, whose known rule of warfare is an undistinguished destruction of allages, react, & conditions of existence; a. Difference between 2 bands (IR The has incided treasonable insurrections of our fellow citizens, with the and visible) difference imaging he has wage o eniel wat against human nature itself, violating it's most sa and ratios between wavebands our fellow-cutigans, b. Cropped version of (a) our fellow-cuttions, c. "Otsu" multi threshold technique to enhance different intensity ranges our fellow-cuttings d. Assigning pseudo color (remove transition edges from (c) our fellow-cuttigents, e. Joining the dots - pseudo color (artistic interpretation) f. Removed citizen for clarity of our fellow-subjects, viewing (make equal to

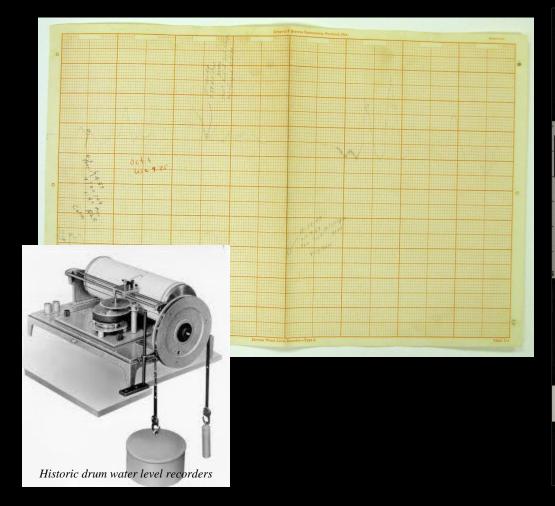
background text

he has endeavoied to trong on the inhabitants of our prontiers the merciless Indian

Fugitive Media

U.S. Geological Survey: Recovery of analog data from paper charts

• 50-75 year old ink fading ink



Herblock Washington Post Political Cartoon Collection

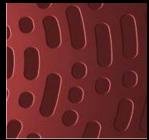
• 35-45 year old ink fading ink



Preservation and Transfer of Original Analog Record

- Historic versus twentieth century materials
 - Modern and Fugitive media
- Collaborative and cooperative effort of:
 - Information technology colleagues
 - Scientists
 - Curators, historians, researchers
 - Integrating new non-invasive technologies
 - Reaching out to industry



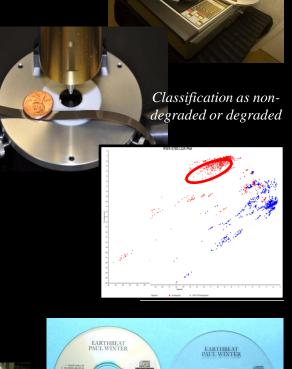


Preservation of Modern Materials

- Develop a tool for libraries, archives and museums to detect (before damage) whether a tape can safely be played for transfer and access to content
- Rapid non-destructive identification of degraded magnetic tape
- Matrix of risk for storage media (e.g. CD-ROM/CD-R/DVD)
- Memorandum of Understanding (MOU) between LC and Fuji to utilize their accelerated aging laboratories to induce degradation of older tape formats









Access: Data Organization and Integration "Scripto-Spatial"

A GIS system for documents

- Link data within and across collection items
- Temporal, spatial and layering of data
- Visualization and representation of scientific data to interpret:
 - Materials characterization
 - Identification, Geographical, Chronological, Use of Materials
 - Creation techniques
 - Enhancing lost / obscured information



Scriptospatial Data Interface "mapping of documents"

